

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A switching method, for use in a VLAN (virtual local area network) including at least one WDM optical path, comprising:

deriving a VLAN ID from a received packet;

deriving a wavelength ID value related to a carrier wavelength of the received packet;

and

using at least both the VLAN ID value and the wavelength ID value for making an optical VLAN forwarding decision for the packet to provide a VLAN identifying capacity greater than that provided solely by a VLAN ID carried by a frame.

2. (Original) The method of claim 1, including:

managing a forwarding database storing packet records including received and forwarded values for VLAN ID, and carrier wavelength; and

said step of using further including searching the database for data forwarding information, and forwarding the packet in response to a result of said searching.

3. (Original) The method of claim 1, including:

parsing a received packet and determining the presence of a valid VLAN ID field; and performing said two steps of deriving and said step of using only when there is a valid

VLAN ID field.

4. (Original) The method of claim 3, including:

managing a forwarding database storing packet records including received and forwarded values for VLAN ID, and carrier wavelength; and

said step of using further including searching the database for data forwarding information, and forwarding the packet in response to a result of said searching.

5. (Original) The method of claim 1, including:  
parsing a received packet and determining the presence of a valid VLAN ID field;  
determining if a set maximum VLAN ID capacity has been reached; and  
performing said two steps of deriving and said step of using only when the maximum VLAN ID capacity has been reached.

6. (Original) The method of claim 5, including:  
managing a forwarding database storing packet records including received and forwarded values for VLAN ID, and carrier wavelength; and  
said step of using further including searching the database for data forwarding information, and forwarding the packet in response to a result of said searching.

7. (Currently Amended) A computer readable media ~~having~~ stored with computer readable data instructions that are executable for physically implementing the method of claim 1.

8. (Currently Amended) A computer readable media ~~having~~ stored with computer readable data instructions that are executable for physically implementing the method of claim 2.

Claims 9-10. (Canceled)

11. (Currently Amended) A network node switching device for use in a VLAN (virtual local area network), comprising:  
means for switching a received packet at least from or to WDM optical paths,  
means for deriving a VLAN ID from the received packet;  
means for assigning a wavelength ID to the packet; and

means for making a forwarding decision for the packet based upon at least both a VLAN ID value and a wavelength ID value to provide a VLAN identifying capacity greater than that provided solely by a VLAN ID carried by a frame.

12. (Original) The network node switching device of claim 11, wherein said means for assigning performs its function only when a forwarding database indicates a threshold value of used VLAN IDs has been reached.

13. (Original) The network node switching device of claim 11, wherein said means for assigning performs its function only when a valid VLAN ID is present in the received packet.

14. (Original) The network node switching device of claim 11, further including:  
means for managing a forwarding database storing packet records including received and forwarded values for VLAN ID and carrier wavelength.

15. (Currently Amended) A switch for forwarding a packet having a header with a VLAN ID, for use in controlling a link in a data transmission network to provide a VLAN identifying capacity greater than that provided solely by a VLAN ID carried by a frame, comprising:

- a port to receive the packet;
- a port to forward the packet;
- at least one of said ports having optical paths with WDM;
- a parsing engine to derive a VLAN ID value based upon a VLAN field in the received packet;
- a computer; and
- a computer readable media having stored with computer readable data instructions that are executable by said computer for physically implementing the method of claim 1.

16. (Currently Amended) A switch for forwarding a packet having a header with a VLAN ID, for use in controlling a link in a data transmission network to provide a VLAN identifying capacity greater than that provided solely by a VLAN ID carried by a frame, comprising:

- a port to receive the packet;
- a port to forward the packet;
- at least one of said ports having optical paths with WDM;
- a parsing engine to derive a VLAN ID value based upon a VLAN field in the received packet;
- a computer; and
- a computer readable media having stored with computer readable data instructions that are executable by said computer for physically implementing the method of claim 2.

17. (Currently Amended) A switch for forwarding a packet having a header with a VLAN ID, for use in controlling a link in a data transmission network to provide a VLAN identifying capacity greater than that provided solely by a VLAN ID carried by a frame, comprising:

- a port to receive the packet;
- a port to forward the packet;
- at least one of said ports having optical paths with WDM;
- a parsing engine to derive a VLAN ID value based upon a VLAN field in the received packet;
- a computer; and
- a computer readable media having stored with computer readable data instructions that are executable by said computer for physically implementing the method of claim 3.

18. (Currently Amended) A switch for forwarding a packet having a header with a VLAN ID, for use in controlling a link in a data transmission network to provide a VLAN

identifying capacity greater than that provided solely by a VLAN ID carried by a frame,  
comprising:

- a port to receive the packet;
- a port to forward the packet;
- at least one of said ports having optical paths with WDM;
- a parsing engine to derive a VLAN ID value based upon a VLAN field in the received packet;
- a computer; and
- a computer readable media having stored with computer readable data instructions that are executable by said computer for physically implementing the method of claim 4.

19. (Currently Amended) A switch for forwarding a packet having a header with a VLAN ID, for use in controlling a link in a data transmission network to provide a VLAN identifying capacity greater than that provided solely by a VLAN ID carried by a frame,  
comprising:

- a port to receive the packet;
- a port to forward the packet;
- at least one of said ports having optical paths with WDM;
- a parsing engine to derive a VLAN ID value based upon a VLAN field in the received packet;
- a computer; and
- a computer readable media having stored with computer readable data instructions that are executable by said computer for physically implementing the method of claim 5.

20. (Currently Amended) A switch for forwarding a packet having a header with a VLAN ID, for use in controlling a link in a data transmission network to provide a VLAN identifying capacity greater than that provided solely by a VLAN ID carried by a frame,  
comprising:

- a port to receive the packet;

a port to forward the packet;  
at least one of said ports having optical paths with WDM;  
a parsing engine to derive a VLAN ID value based upon a VLAN field in the received packet;  
a computer; and  
a computer readable media having stored with computer readable data instructions that are executable by said computer for physically implementing the method of claim 6.

21. (Original) A method of transmitting information, comprising:  
receiving first and second VLAN (Virtual Local Area Network) tagged frames with both frames having the same VLAN ID (Identification);  
transmitting the first frame over an optical fiber with a first wavelength and of a WDM (Wavelength Division Multiplexing) network; and  
transmitting the second frame over the optical fiber with a second wavelength different from the first wavelength and over the WDM (Wavelength Division Multiplexing) network.